

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 10/772,136 Confirmation No. 4260
Applicant : McCann, Richard J.
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TC/AU : 3724
Examiner : Landrum, Edward L.

Docket No. : 104841.1
Customer No. : 23828

DECLARATION OF RICHARD J. McCANN

1. I, Richard J. McCann, am the named inventor in the above-identified pending patent application.
2. I am generally experienced as a machinist, particularly with respect to gunsmithing and knife making. I am schooled in mechanics, hydraulics, pneumatics and tool and cutter grinding as part of an aircraft-oriented machinist apprenticeship.
3. I have been designing, manufacturing, and selling knives for at least 10 years. I am very familiar with others' designs of folding, locking knives, all of which use some form of leaf or coil spring to bias a member into position to lock the blade.
4. A person of ordinary skill in the art of knife design is likely to be a general machinist with little or no specialized training in knife design, but with several years of hands-on experience.
5. Bending springs, whether leaf or coil, made of metal or any other material are susceptible to fatigue and/or breakage, resulting in mechanical failure.
6. Metal springs must be made of the proper material and be properly tempered in order to be both flexible and resilient, while also not being too brittle so that they break nor too

soft so that they quickly fatigue. This can be particularly critical in very small springs that cannot be “over engineered” to exceed minimum specifications due to space limitations. Any metal spring has a finite life because flexing always causes fatigue. Terminal fatigue can manifest as either a loss of resiliency or as a crack that propagates to the point of breakage, resulting in mechanical failure

7. Flexing metal springs in locking folding knives are subject to corrosion and to obstruction by dirt and other debris, including ice. A traditional approach to this problem has been to either permanently lubricate or enclose the springs to minimize the detrimental effects.

8. Despite the availability of the knife design shown in the Collins patent and the known limitations of metal springs, I am not aware of anyone prior to my doing so who has substituted a gas spring into this design in order to overcome this known shortcoming.

9. Hydraulic fluid (or any liquid) is by definition not compressible. It is inconceivable how a “hydraulic spring” could be constructed. The Poelmann patent certainly does not disclose how such a device could be constructed. Poelmann’s bare reference to a “pneumatically-forced system” does not provide sufficient direction to me or any person of ordinary skill in knife design to modify the knife shown in the Collins patent to make the knife of my claimed invention.

10. I only recently began sales of a limited production run of 100 of this knife. These limited production knives are being sold for \$400. I have sold 7 of these knives. Standard production knives of this design are expected to sell for approximately \$200. They are shown and available on my website: <http://www.mccannindustries.com/knives/foldair/foldair.html>

11. It is of particular interest to purchasers that the spring cannot fatigue from use, is a closed cylinder so corrosion is not a factor, and, because there is no bending action at all, it

cannot break.

12. I recently displayed my knife at my company's booth (McCann Industries) at an international trade show held in Los Vegas, Nevada, on February 9-12, 2006. This show (known as the Shooting, Hunting and Outdoor Trade Show, or SHOT Show) is the largest annual exhibition of this type which includes booths from dozens of knife manufacturers. My knife, known as the Foldair™, generated substantial interest among collectors, enthusiasts, and writers. Mr. Steve Shackleford, editor of *Blade*, the worlds number one knife publication, and *Blade Trade* magazine, interviewed me and inspected/photographed the knife for a review in an upcoming issue. Neither Mr. Shackleford nor any of the hundreds of attendees at the trade show inspecting the knife indicated ever having known of a locking knife to use a closed gas-filled piston cylinder unit as a gas spring in place of the standard coil or leaf springs that have been in use for as long as locking folding knives have been in existence.

13. The Statement of Kim Breed (submitted herewith) was personally given to me and known to be personally signed by him. Mr. Breed has been testing and evaluating knives as a Field Editor of *Blade* magazine for 15 years and has expressed an interest, echoing that of Mr. Shackleford, to feature this unique knife in this leading publication. He attests to the fact that knife users experience breakage of coil and leaf springs and that the claimed aspects of my invention provide a solution this long-felt need.

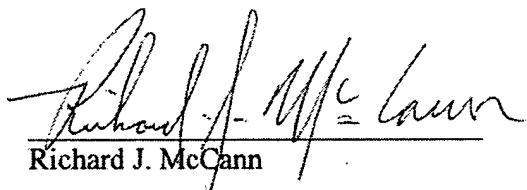
14. The Statement of John A. Larsen (submitted herewith) was personally given to me and known to be personally signed by him. He has been a Contributing Editor to *Tactical Knives* magazine for over 10 years and knife collector for more than 40 years. He attests to the fact that the locking mechanism of my invention is unique and nonobvious.

15. The aspect of the knife that is unique – the use of the gas-filled closed

piston/cylinder to provide the biasing force to lock the blade – is what has filled a long felt need in the art to replace springs that are subject to breakage and/or fatigue and is the subject of the present claims.

The undersigned, being hereby warned that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001, and that such willful false statements may jeopardize the validity of any patent resulting from this application, declares that the facts set forth above are true; all statements made of my own knowledge are true; and all statements made on information and belief are believed to be true.

Date: 6-13-06



A handwritten signature in black ink, appearing to read "Richard J. McCann". The signature is fluid and cursive, with "Richard" on the top line and "J. McCann" on the bottom line.

Richard J. McCann